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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,777	11/12/2003	Terrence W. Schmidt	1934-7-3	7411

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EXAMINER

VASUDEVA, AJAY

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/712,777	SCHMIDT ET AL.	
	Examiner	Art Unit	
	Ajay Vasudeva	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/25/2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 18-25, 28 and 31-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 18-25, 28 and 31-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 18, 19, 20-25, 28, 31, 32, 35, 37, 39, 40 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 52-143691 A ('691).

Re claims 1, 18 and 19, JP ('691) shows a mono-hull vessel with a frame [1], a bay [3] disposed in the frame and operable to receive a mission module [2] in the form of an air cushion boat, and an interface [4] operable to be coupled between the frame and the mission module.

Regarding the newly added limitation “a multi-mode hull operable to allow the vessel to function in at least two operational modes”, applicant may note that the term “mode” is an non-specific term, and has been broadly interpreted to mean “a given method, condition or a status of functioning; or a variety in functioning”. In the present case, a vessel can be considered to be functioning in a first mode when the vessel is stationary, and in a second mode when it is moving. Alternatively, the vessel can also be considered to be functioning in a first mode when the module is docked in the bay, and in a second mode when the module is undocked. The vessel is capable of functioning in any one of the first and second modes.

Re claim 3-7, the interface is capable of supporting a person(s) in a manner that the person could physically transfer fuel, water, electrical power or telecommunication equipment

Art Unit: 3617

between the vessel and the module. Therefore, the interface is considered as operable to facilitate the exchange of fuel, water etc. between the frame and the module.

Re claims 20-25, 32 and 40, the limitation "mission module is configured to" has been interpreted to mean "mission module is capable of". The mission module of JP ('691) is designed to carry passengers and freight to and from the vessel.

Regarding claims 20 and 21, the module is therefore considered to be at least capable of ferrying appropriate anti-mine and anti-submarine equipment and personnel to a particular site so as to participate in anti-mine and anti-submarine warfare operations. Applicant may note that claims 20 and 21 do not recite any specific structural limitation critical to the anti-mine and anti-submarine warfare, and are merely characterized by a function relating to an anti-mine and anti-submarine warfare.

Similarly, regarding claims 22 and 23, the module is considered to be substantially self-contained with respect to special operation or logistics support system because ferrying of passengers between shore and the ship is considered to be such. Further, regarding claims 24 and 25, the module is also capable of intercepting another boat, and/or to perform surveillance function.

Re claims 35 and 43, the vessel would have a low freeboard when carrying heavy load.

As noted in the previous Office action, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function (see MPEP 2114). If the prior art discloses all claimed structural limitations and is capable of performing the recited function, it meets the requirements of the claim.

Also, the independent claims 1 and 18 are subcombination claims directed to a vessel, and do not positively recite a combination with a mission module. It is noted that the limitations “**operable to receive a mission module**” is merely an intended use limitation, and has been broadly interpreted to mean “*capable of receiving a mission module*”. In the instant case, the vessel is considered as capable of receiving a mission module, and therefore meets the requirements of the claims. Further, any structural and/or functional characteristic attributable to the mission module is immaterial and carries no patentable weight because the claims do not claim a mission module.

3. Claims 1-8, 18, 19, 20-25, 28, 31-36, 38 and 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 06-040379 A ('379).

JP ('379) shows a twin-hulled vessel with a frame [5], a bay [5] disposed in the frame and operable to receive a mission module [7] in the form of a midget submarine, and an interface [8] operable to be coupled between the frame and the mission module.

As explained in the rejection of ¶2 above, the term “mode” in the newly added limitation “a multi-mode hull operable ...in at least two operational modes” has been broadly interpreted to mean “a given method, condition or a status of functioning; or a variety in functioning”. In the present case, a vessel can be considered to be functioning in a first mode when the vessel is stationary, and in a second mode when it is moving. Alternatively, the vessel can also be considered to be functioning in a first mode when the module is docked in the bay,

Art Unit: 3617

and in a second mode when the module is undocked. The vessel is capable of functioning in any one of the first and second modes.

Re claim 3-7, the interface is operable to facilitate the exchange of fuel, water, electrical power or telecommunication equipment between the vessel and the module (figure 1).

Re claims 20-25, 32 and 40, the limitation "configured to" has been interpreted to mean "capable of". In the present case, the mission module is a submarine that can be used to carry passengers and freight to and from the vessel. As explained in ¶2 above, regarding claims 20 and 21, the module is also considered to be capable of ferrying appropriate anti-mine and anti-submarine equipment and personnel to a site so as to participate in anti-mine and anti-submarine warfare operations. Claims 20 and 21 do not recite any specific structural limitation critical to the anti-mine and anti-submarine warfare, and are merely characterized by a functional limitation of an anti-mine and anti-submarine warfare. Similarly, regarding claims 22 and 23, the module is considered to be substantially self-contained with respect to special operation or logistics support system because ferrying of passengers between shore and the ship is considered to be such. Further, regarding claims 24 and 25, the module is also capable of intercepting another boat, and/or to perform surveillance function.

Re claims 35 and 43, the vessel would have a low freeboard when carrying heavy load.

Because JP ('379) discloses all claimed structural limitations and is capable of performing the recited function, it meets the requirements of the claim. Additionally, see the rejection in ¶2 above for the interpretation of the functional limitations.

Response to Arguments

4. Applicant's arguments filed 1/25/2006 have been fully considered but they are not persuasive.

Note: Applicant may note that the scope of rejection based on JP ('691) and JP ('379) has been expanded. Specifically, claims 20, 21, 24 and 25 have been rejected on new grounds.

(A) **102(b) rejections based on JP ('691) and JP ('379):**

Applicants' Argument: Applicant has added new limitations "a multi-mode hull operable ... in at least two operational modes" in each of the independent claims, and has argued that although the vessels of JP ('691) and JP ('379) carry different equipment, neither discloses a multi-mode hull that allows a vessel to function in at least two operational modes. Applicant argued

Examiner's Response: Applicant may note that the term "mode" is a non-specific term, and has been broadly interpreted to mean "a given method, condition or a status of functioning; or a variety in functioning". In the present case, a vessel can be considered to be functioning in a first mode when the vessel is stationary, and in a second mode when it is moving. Alternatively, the vessel can also be considered to be functioning in a first mode when the module is docked in the bay, and in a second mode when the module is undocked. The vessel is capable of functioning in any one of the first and second modes.

Further, the newly added limitation in the apparatus claims is not a structural limitation, but merely a functional limitation. As explained previously, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function (see MPEP 2114). Because JP ('691) and JP ('379) disclose all claimed structural limitations and are capable of performing the recited function, they meet the requirements of the claims.

(B) **103(a) rejections based on Bender et al. ('117) in view of JP ('691):**

Although applicant's arguments against the above rejection are not persuasive, this rejection has been currently withdrawn to avoid multiple rejections.

Conclusion


5. This is a non-final rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva
Examiner
Art Unit 3617


AJAY VASUDEVA
PATENT EXAMINER 5/26/06